UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/566,850 | 02/01/2006 | James Daniel Asbury | 209546-104849 | 9756 |

44200 7590 02/25/2009

HONIGMAN MILLER SCHWARTZ & COHN LLP
38500 WOODWARD AVENUE
SUITE 100
BLOOMFIELD HILLS, MI 48304-5048

| EXAMINER | |
|---|---|
| CLARK, GREGORY D | |
| ART UNIT | PAPER NUMBER |
| 1794 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 02/25/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/566,850 | ASBURY ET AL. | |
| | Examiner | Art Unit | |
| | GREGORY CLARK | 1794 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 January 2009*.

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-15 and 18-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-15 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

The examiner acknowledges receiving the applicant arguments/remarks dated 1/23/2009. The examiner notes that claims 1-7, 9-15 and 18-23 were pending. Claim 8 was and remains cancelled. The elected claims of this office action remain claims 1-7, 9-15 and 18-23.

The applicant's arguments with respect to claims 1-7, 9-15 and 18-23 have been considered but are moot in view of the new grounds of rejection necessitated by the applicant's arguments.

Rejections and objections made, in the previous office action, that do not appear below have been overcome by applicant's amendments and therefore the arguments pertaining to these rejections/objections will not be addressed.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

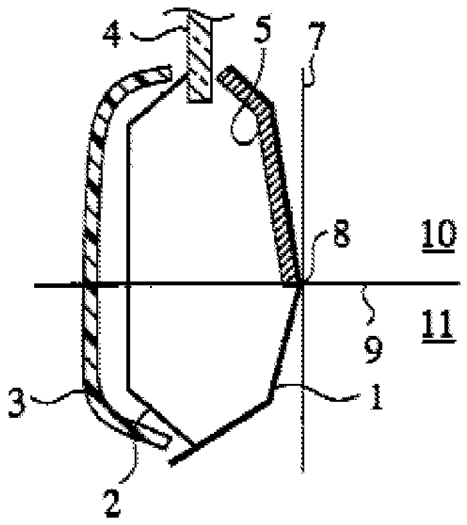
> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2, 4-6, 9, 10, 12-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Ogawa (2004/0124668).

Regarding Claims 1-2, 4-6, 9, 10, 12-14, Ogawa teaches applying heat insulation materials, such as polypropylene film (paragraph 58), to the inside portion of an outer vehicle panel that is mainly exposed to solar radiation (paragraph 36). Ogawa further discloses such heat insulating materials can be applied in a host of areas of the vehicles which include: a door trim, a door inner panel, a head lining, a pillar garnish, a door damp proof sheet, and the like (paragraph 46). Ogawa teaches that the deposition of aluminum flakes (reflective material) is a suitable method for adhering aluminum to the film surface (produces a materialized film) (paragraph 52).

Figure 3A shows that the insulating material (5) is bonded directly to the inside portion of the non-flat outer vehicle panel (see figure 3A below). The film matches the contour of the surface of the adjacent vehicle surface with no air gap. Ogawa further discloses that the outer panel (1) is a vehicle body structural member and the back surface of the outer panel (1) is the opposite surface to the surface constituting the exterior of the vehicle (paragraph 45).

FIG.3A




Claims 1-5, 7, 9-13 and 15 are rejected under 35 U.S.C. 102(a) as being anticipated Segawa (4,068,034).

Regarding Claims 1-5, 7, 9-13 and 15, Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (polypropylene, Column 2, lines 62-63, 65 ), and formable metalized film (Column 3, line 55) bonded to said core layer. Segawa teaches that one of the heat insulating materials is metalized polyethylene terepthalate (column 3, lines 57-58). Segawa teaches that such materials have utility in vehicles (the examiner interprets this to include any area requiring heat insulation such as panels or headlines) for heat insulation (Column 3, lines 17-20).

Segawa also teaches that the heat-insulation can be used in the roofing material for an air-conditioned vehicle and acts to prevent the temperature of the vehicle's interior from being elevated by the heat from the (column 5, lines 6-11). Segawa also teaches that the heat insulation material can be applied with an adhesive or bonding agent directly to the exposed surface of the article (Column 3, line 24-28). The process taught by Segawa indicates the directly bonding of the insulation material to the metal surface; the insulation material would conform to the contour of the roof or some other location without any air gap.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 14, and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034) and in view of Ogawa (2004/0124668).

Regarding Claims 18-21, Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (polypropylene, Column 2, lines 62-63, 65 ), metalized polyethylene terepthalate (column 3, lines 57-58), and formable metalized film (Column 3, line 55) bonded to said core layer. In using the term formable, the examiner takes the

position that the metalized films taught by Segawa are fully capable of conforming to the contour of the surface to which the film is applied. Segawa also teaches that the heat-insulation can be used in the roofing material for an air-conditioned vehicle and acts to prevent the temperature of the vehicle's interior from being elevated by the heat from the (column 5, lines 6-11). Segawa further discloses that such metalized material (heat insulation material) can be applied with an adhesive or bonding agent directly to the exposed surface of the article (Column 3, line 24-28). The process taught by Segawa indicates that the directly bonding of the insulation material to the metal surface is without any air gap. Segawa discloses that such materials can be used in roofing materials of vehicle which are known to be non-planar. Segawa achieve directly just as the applicant does though by a different process. Segawa does not mention the terms headliner or thermoforming.

Ogawa teaches applying heat insulation materials, such as polypropylene film (paragraph 58), to the inside portion of an outer vehicle panel that is mainly exposed to solar radiation (paragraph 36). Figure 3A shows that the insulating material is bonded directly to the inside portion of the non-flat outer vehicle panel. The film matches the contour of the adjacent vehicle surface. Ogawa further discloses that the outer panel is a vehicle body structural member and the back surface of the outer panel is the opposite surface to the surface constituting the exterior of the vehicle (paragraph 45). The figure presented by Ogawa shows a heat insulating film bonded directly to the inside surface of the outer most layer of the vehicle along a non-flat surface with no apparent air gap. Ogawa further discloses such heat insulating materials can be applied

in a host of areas of the vehicles which include: a door trim, a door inner panel, a head lining, a pillar garnish, a door damp proof sheet, and the like (paragraph 46). Ogawa teaches that such materials can be used in a headliner as claimed by the applicant. Ogawa fails to mention that such materials can be applied by a thermoforming process.

With the teachings of Segawa and Ogawa a person of ordinary skill in the art at the time of the invention could make a similar headliner with no air gap by applying a different process such as using an adhesive or bonding agent to directly attach the film to the surface. The thermoforming step is viewed as process limitation and is not related to ultimate patentability to the making of the product article.

If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (In re Thorpe, 227 USPQ 964,966). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to the applicant to come forward with evident establishing an unobvious difference between the claimed product and the prior art product (in re Marosi, 710 F.2$^{nd}$, 802, 218 USPQ 289, 292 (Fed. Cir. 1983, MPEP 2113).

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034), as applied to claim 18 above, and in view of Ogawa (2004/0124668).

Regarding Claims 22 and 23, Segawa discloses that the heat insulation composite material or laminate which is adhered to a metal layer can optionally have an additional layer of a priming material adhered to the other surface of the metal (column 2, lines 1-6). Segawa further discloses that the term "priming material" as used herein means a heat-insulation material or reinforcing material such as paper or fabric (column 2, line 61).

Claims 9-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034) in view of Ogawa (2004/0124668) and Holtrop (4,851,283).

Regarding Claims 9-15 and 18-21, Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (polypropylene, Column 2, lines 62-63, 65 ), metalized polyethylene terepthalate (column 3, lines 57-58), and formable metalized film (Column 3, line 55) bonded to said core layer. In using the term formable, the examiner takes the position the metalized films taught by Segawa are fully capable of conforming to the contour of the surface to which the film is applied. Segawa also teaches that the heat-insulation can be used in the roofing material for an air-conditioned vehicle and acts to prevent the temperature of the vehicle's interior from being elevated by the heat from the (column 5, lines 6-11). Segawa further discloses that such metalized material (heat insulation material) can be applied with an adhesive or bonding agent directly to the exposed surface of the article (Column 3, line 24-28). The process taught by

Segawa indicates that the directly bonding of the insulation material to the metal surface is without any air gap. Segawa discloses that such materials can be used in roofing materials of vehicle which are known to be non-planar. Segawa achieve directly just as the applicant does though by a different process. Segawa does not mention terms headliner or thermoforming.

Ogawa teaches applying heat insulation materials, such as polypropylene film (paragraph 58), to the inside portion of an outer vehicle panel that is mainly exposed to solar radiation (paragraph 36). Figure 3A shows that the insulating material is bonded directly to the inside portion of the non-flat outer vehicle panel. The film matches the contour of the adjacent vehicle surface. Ogawa further discloses that the outer panel is a vehicle body structural member and the back surface of the outer panel is the opposite surface to the surface constituting the exterior of the vehicle (paragraph 45). The figure presented Ogawa by shows a heat insulating film bonded directly to the inside surface of the outer most layer of the vehicle along a non-flat surface with no apparent air gap. Ogawa further discloses such heat insulating materials can be applied in a host of area of the vehicles which include: a door trim, a door inner panel, a head lining, a pillar garnish, a door damp proof sheet, and the like. Ogawa teaches that such materials can be used in a headliner as claimed by the applicant. Ogawa fails to mention that such materials can be applied by a thermoforming process.

Holtrop discloses that materials such as polypropylene and polyethylenene terephthalate (column 2, lines 45-53) can be used to form headliners (column 2, lines 31-32) by a thermoforming process (column 3, lines 19-20).

Segawa discloses the direct bonding of the insulation material to the metal surface (including roofs) without any air gap. Ogawa discloses that such materials can be used in a headliner as claimed by the applicant. Holtrop discloses that thermoplastic material such as polypropylene and polyethylenene terephthalate are used to make headliners by a thermoforming process.

A person of ordinary skill in the art at the time of the invention with the teachings of Segawa, Ogawa, and Holtrop could have readily metalized known thermoplastic materials such as polypropylene and polyethylenene terephthalate to make insulation materials suitable for the thermoforming process to form headliners.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY CLARK whose telephone number is (571)270-7087. The examiner can normally be reached on M-Th 7:00 AM to 5 PM Alternating Fri 7:30 AM to 4 PM and Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794

GDC